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**Federal Aviation
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SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin advises you, registered owners, operators, and certificated repair facilities of **all aircraft equipped with Pratt & Whitney Canada (P&WC) PT6A-38, -40, -41, -41AG, -42, -42A, and -62 Series engine models** of recent incidents involving damage to the first stage reduction sun gear and planet gears. **These engines are installed on, but not limited to, Piper PA-42 (Cheyenne III); Raytheon Beech A200 (C12A and UC12B), A200CT (C12F and RC12D), B200C (UC12M), King Air 200C, RC12DGR, Super King Air 200; and Pilatus Turbo trainer PC-9.**

These incidents indicate that either all operators and overhaul shops might not always follow the P&WC Overhaul Manual criteria or the engine was overhauled prior to the relevant Overhaul Manual revision. P&WC revised their Overhaul Manual in December 1999. This revision changed the criteria for the specified models and states that the first stage sun gear and planet gears must be replaced at scheduled overhaul regardless of their condition.

Background

In September 1999, P&WC notified the PT6A operators and P&WC's global network of factory-owned and independent Designated Overhaul Facilities of this Overhaul Manual revision by P&WC Service Information Letter, SIL No. PT6A-078. P&WC provided revised Overhaul Manuals at that time.

Risk analysis and safety management programs indicate that compliance with the current Maintenance Manual requirements of inspecting the chip detector every 100 hours and the oil filter every 200 hours will provide early indications of wear and corrective action, resulting in reduced safety risks.

Recent events have highlighted the fact that some operators and/ or overhaul shops, especially those not overseen by the P&WC system, might not have followed these requirements. This has resulted in reduced reliability of the first stage reduction gear train and in some cases caused in-flight shutdowns.

Recommendations

We recommend that you:

- Replace the first stage reduction sun gear and planet gears during scheduled overhaul.
- Closely follow the prescribed maintenance practices outlined in the specific engine Maintenance Manuals.

For Further Information Contact

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For additional information or to obtain copies of P&WC documents contact your local P&WC Field Representative or the **P&WC Customer Help Desk** at: (800) 268-8000 (USA and Canada); (450) 647-8000 (International); fax: (450) 647-2888; email: CustomerHelpDesk@pwc.ca